Whom and are Reservaces Commission for recommendations of New 25, 1968

25 November 1968

## OBSERVATIONS ON TYBOUT CORNER LANDFILL

- 1. Approximately 55 acres being applied for
- 2. County planning on five years of operation
- 3. From bore hole analyses, there presently exists a minimum separation between water level and surface grade of 2.4.
- There are several areas where water is visible on the surface. Probably a combination of accumulated rain water and perched water.
- 5. Three sizable ponds on the size, each at different elevations, which presently serve as the recirculation system for a gravel washing operation.
- 6. Ponds appear to act as catchment area for surface and groundwater.
- 7. Subsurface water appears to flow in south-southwest direction, away from Route 71.
- 8. Surface water flow is difficult to describe due to changing topography, but based on daily average of the annual precipitation, the expected runoff is 190,000 GPD, most of which percolates into the ground or evaporates. The contributary drainage area of the landfill site represents less than 20 percent of the total drainage area contributary to the Red Lion Creek bridge at Route 13.
- 9. Man-made barrier, mostly clay, separates ponds from Pigeon Run, except at sluice gate location where, during extremely wet periods, flow from Pond #2 (Sheet #8) is diverted to Pigeon Run. There was no evidence during investigation on 20 November of any seepage from the ponds to Pigeon Run.
- 10. Bore holes closest to Pigeon Run show water elevations below the stream bed, indicating possibility of groundwater underflowing the stream.
- 11. There likewise exists the possibility of the stream feeding into the subsurface supply, which if found to be the case, would require that the stream be maintained by the subsurface flow west of Pigeon Run, from the area of the homes located on Route 74.
- 12. There is no evidence of subsurface flow in the direction of the homes on Route 71, from the landfill. Elevations of homes along Route 71 indicate subsurface flow in other than a northerly direction.